

Immunizations/ Vaccine Preventable Diseases

Publicly funded services to address Immunizations are described in Immunization Program CHILD Profile, and Early and Periodic Screening, Diagnosis and Treatment

Key Findings:

- In 2004, about 78% of children 19-35 months of age in Washington State received all recommended immunizations (4:3:1:3:3). This is statistically comparable to the 2004 national rate of 81%.^{1,b}
- In 2004, estimated immunization coverage rates for children entering kindergarten or first grade (school entry-level) included: DTaP/Td: 92%, Polio: 92%, Measles: 95%, Mumps: 96%, Rubella: 96%, and Hep B: 94%.¹
- Underimmunization can occur when needed vaccines are not administered during acute or chronic care medical visits and when multiple vaccines are not given during the same visit. Transportation problems, lack of immunization schedule at home, multiple family moves, multiple providers, and objections to some immunizations may also serve as barriers to adequate immunization. The 4th DTaP, recommended to be administered between 15 and 23 months, is the most frequently missed immunization.^{1,3}

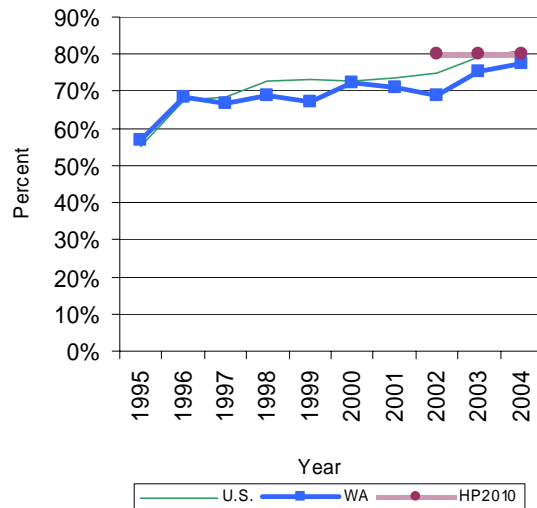
Definition: The standard measure of appropriate immunization for two-year olds is a series of vaccinations that includes 4 doses of diphtheria, tetanus, pertussis (DTP or DTaP), 3 doses polio, 1 dose measles, mumps and rubella (MMR), 3 doses haemophilus influenzae type b (Hib) and 3 doses Hepatitis B (4:3:1:3:3). This measure has fluctuated over time.^a

- Washington is one of about 20 states that permit immunization exemptions for school admittance due to personal or philosophical reasons. In 2004, the statewide exemption rate for children in Washington schools was approximately 4%. Over 95% of those exemptions were for personal or philosophical reasons. Other exemptions are for medical and religious reasons.^{1,2}
- As the following graphs show, although cases are rare and rates low, outbreaks of other vaccine-preventable diseases still occur, emphasizing the importance of continued immunization.
- The last diphtheria case seen in Washington was in 1979. There have been no recent wild type (non-vaccine related) polio cases in Washington and the last vaccine-related case was in 1993. In Washington State, there have been three cases of tetanus in recent years in 1997, 2000 and 2005.
- Pertussis rates in Washington are high and there have been several years since 1995 when the rates exceeded 7 per 100,000. In 2004, Washington's pertussis incidence rate (13.7/100,000) was the 12th highest in the US and the number of cases was more than four and a half times the number reported in 2001.^{2,3}

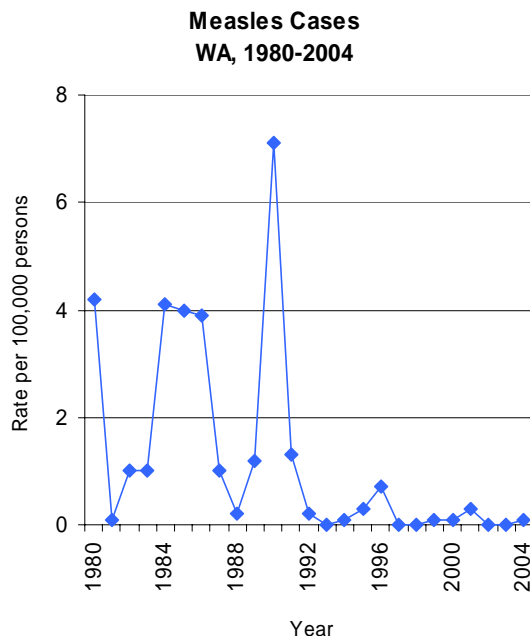
- In 2004, the NIS estimated coverage rate for varicella vaccination of children 19-35 months of age in Washington State was approximately 78%. The coverage rates for this vaccine for the State has risen consistently since 1996 when it was about 6%, but has continued to remain lower than the rate for the United States as a whole which was about 88% in 2004.¹
- Several Local Health Jurisdictions (LHJs) have conducted, or are in the process of conducting, county or other small area preschool immunization coverage surveys. These counties are Thurston, Snohomish, Grant, Grays Harbor, Spokane, Clark, King, Lincoln, Yakima, Whatcom, Benton, Franklin, and Kittitas, Pierce and Cowlitz.^{2,3}

Immunization Rates ¹

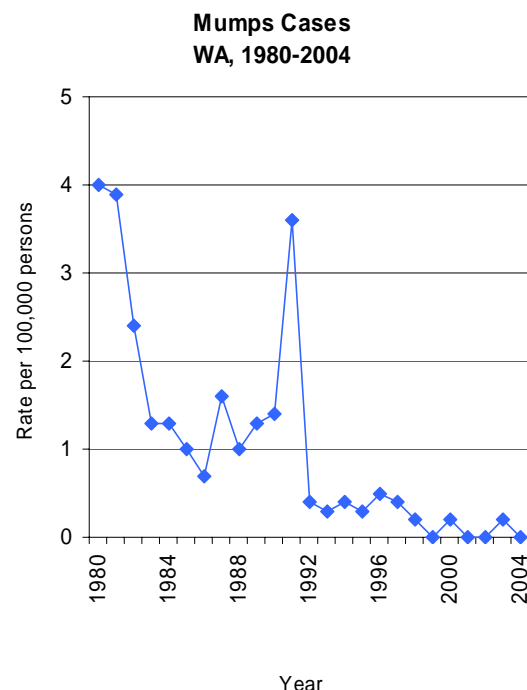
**Percent Children Ages 19-35 Months
Immunized with 4:3:1:3:3
WA and US, NIS 1995-2004**



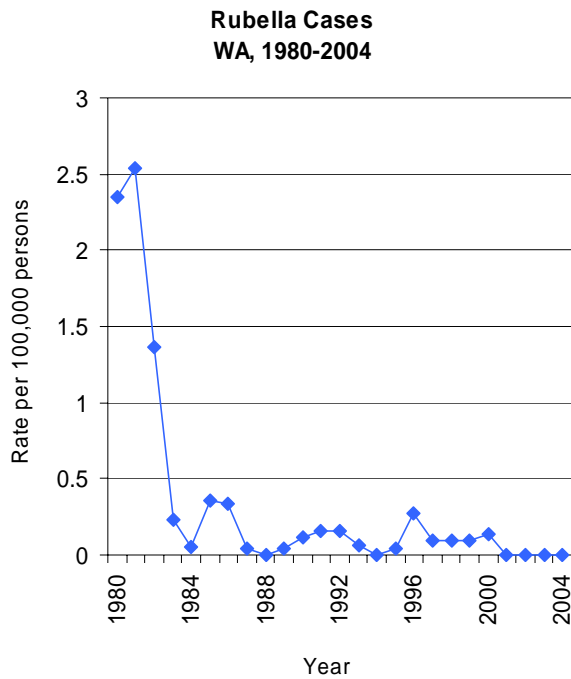
Measles Disease ³



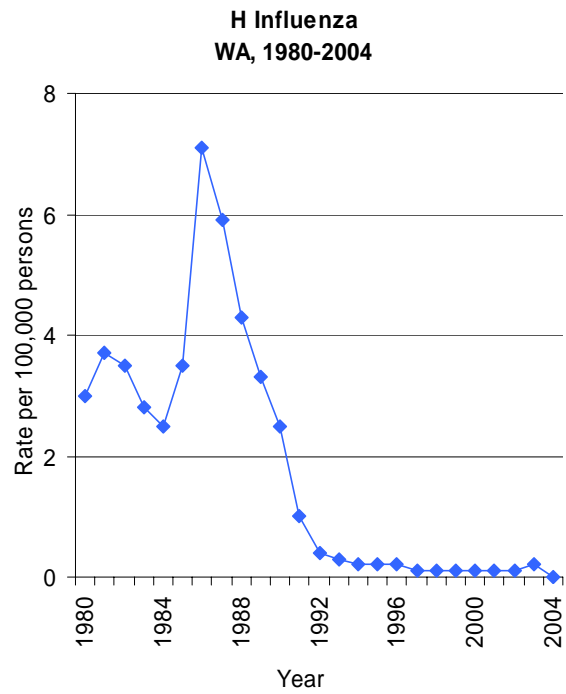
Mumps Disease ³



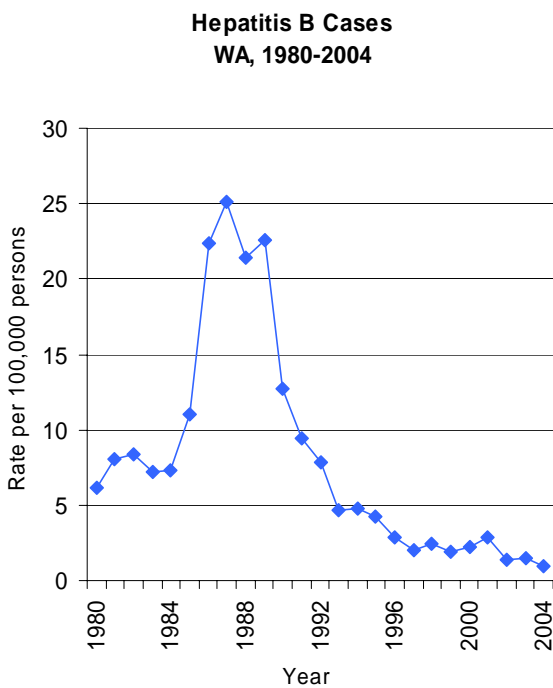
*Rubella Disease*³



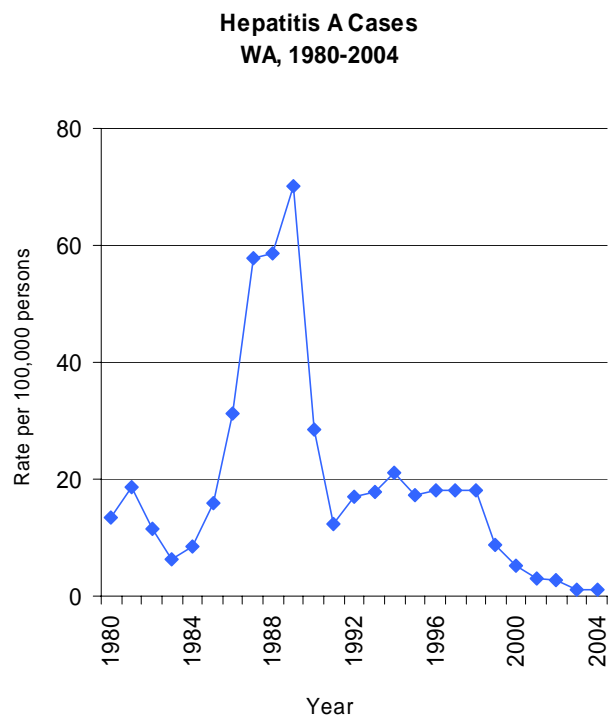
*Haemophilus Influenzae Invasive Disease*³



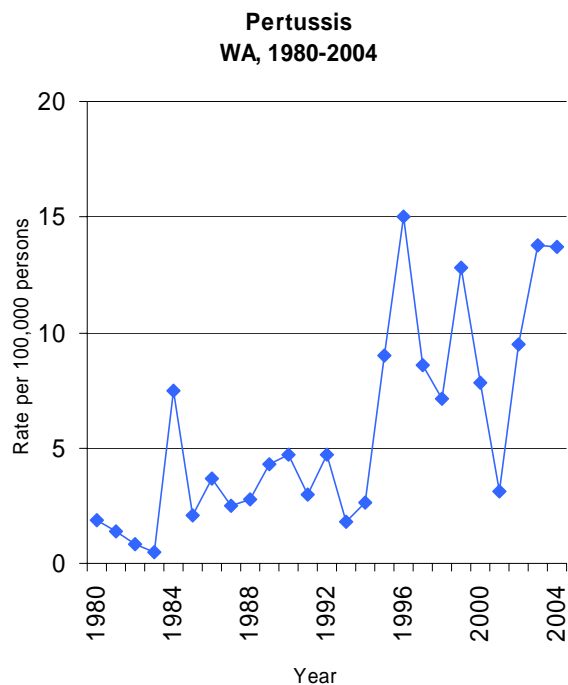
*Acute Hepatitis B Disease*³



*Acute Hepatitis A Disease*³



Pertussis Disease ³



Data Sources

1. National Immunization Survey, Centers for Disease Control and Prevention. 2004
2. IMMENU School Data Software, Washington State Department of Health Immunization Program. 2004
3. Washington State Annual Communicable Disease Reports, Department of Health. 2004

Endnotes

- a. **Abbreviations:** **DTP** - Diphtheria, Tetanus and whole cell Pertussis vaccine; **DTaP** - Diphtheria, Tetanus and acellular Pertussis vaccine; **DT**- Diphtheria, Tetanus vaccine (Pediatric); **Td**- Tetanus, Diphtheria vaccine (Adult); **MMR**- Measles, Mumps, Rubella vaccine; **Hib**- Haemophilus influenzae type b; **HepB**- Hepatitis B; **HepA**- Hepatitis A
- b. Significance is based on 95% confidence intervals